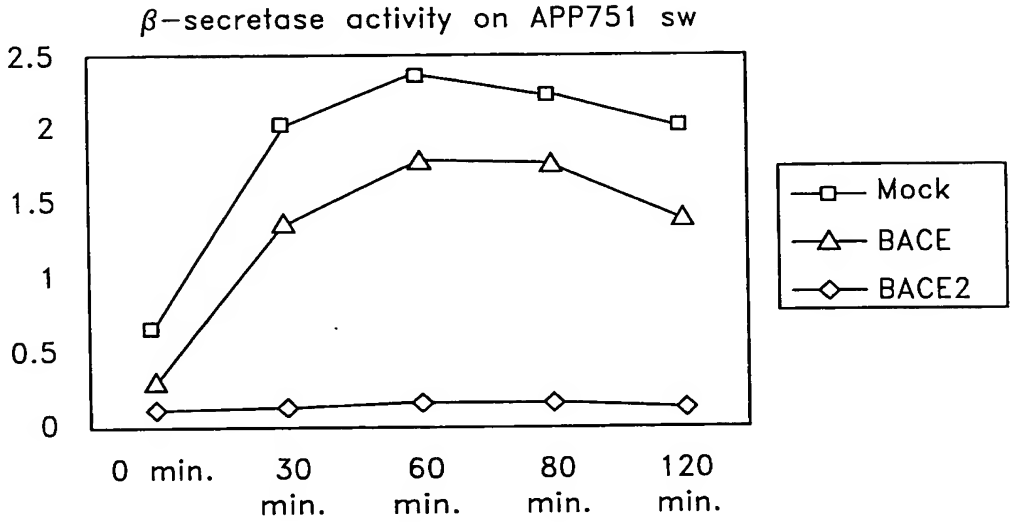
β−secretase activity on APP751 sw
2.5
2
1.5
1
0.5
0
0 min.
30 min.
60 min.
80 min.
120 min.
Mock
BACE
BACE2

FIG. 1A

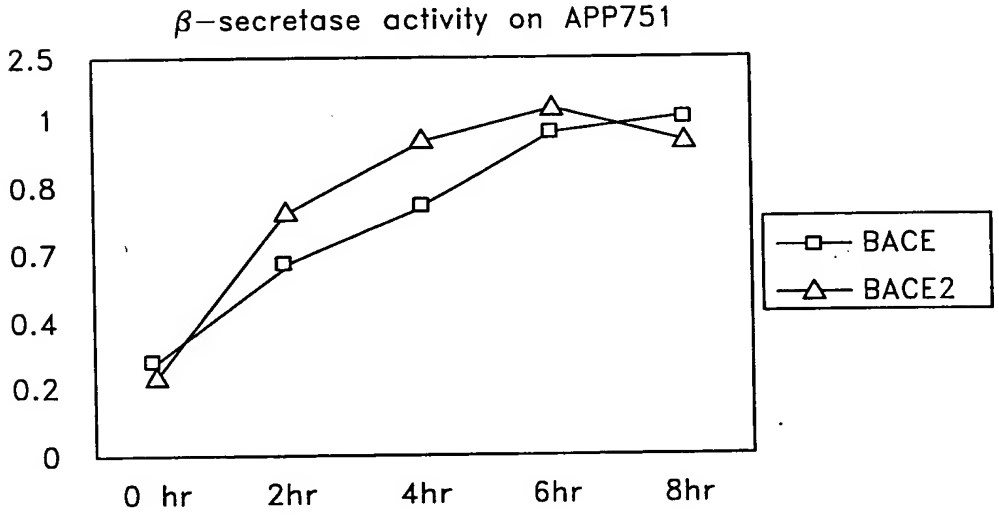
β−secretase activity on APP751
2.5
1
0.8
0.7
0.4
0.2
0
0 hr
2hr
4hr
6hr
8hr
BACE
BACE2

FIG. 1B

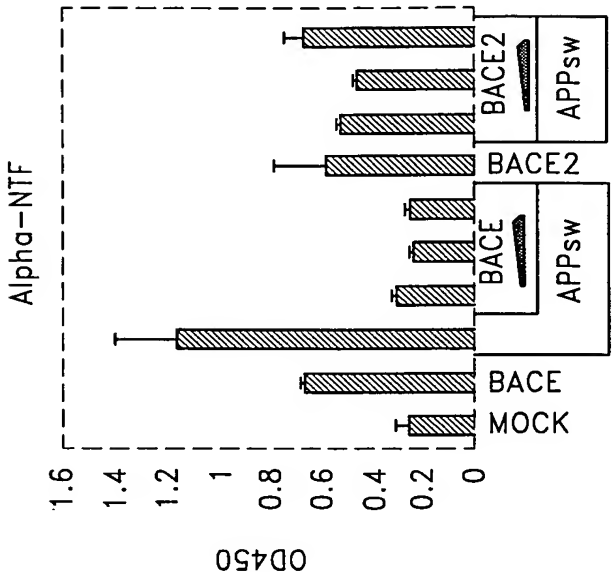
Alpha-NTF
MOCK
BACE
APPsw
BACE
APPsw
BACE2
APPsw
BACE2
APPsw
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
OD450

FIG. 2B

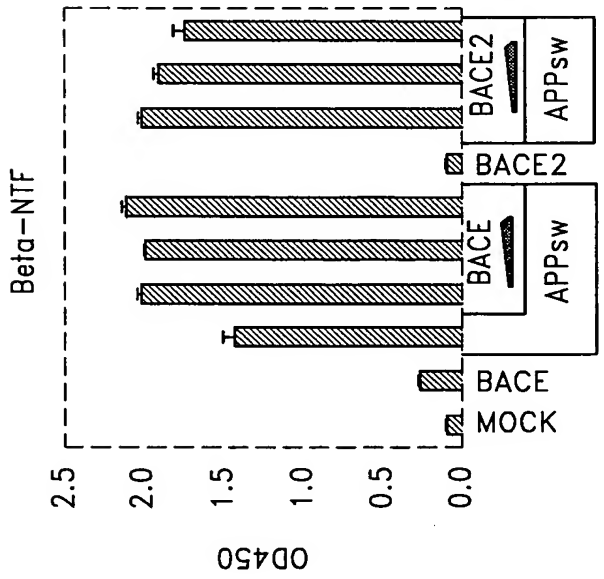
Beta-NTF
MOCK
BACE
APPsw
BACE
APPsw
BACE2
APPsw
BACE2
APPsw
0.0
0.5
1.0
1.5
2.0
2.5
OD450

FIG. 2A

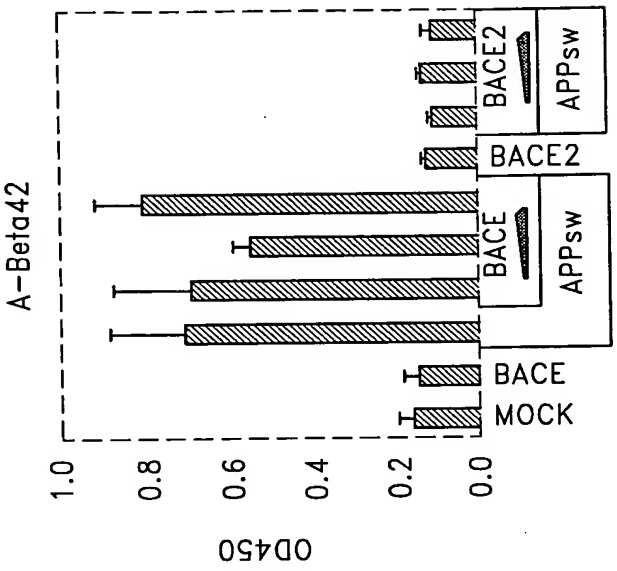
A-Beta42
OD450
1.0
0.8
0.6
0.4
0.2
0.0
MOCK
BACE
BACE
APPsw
BACE2
BACE2
APPsw

FIG. 2D

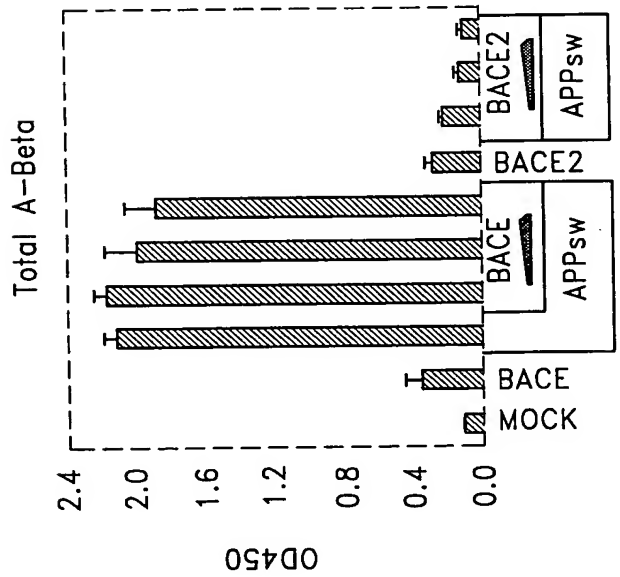
Total A-Beta
OD450
2.4
2.0
1.6
1.2
0.8
0.4
0.0
MOCK
BACE
BACE
APPsw
BACE2
BACE2
APPsw

FIG. 2C

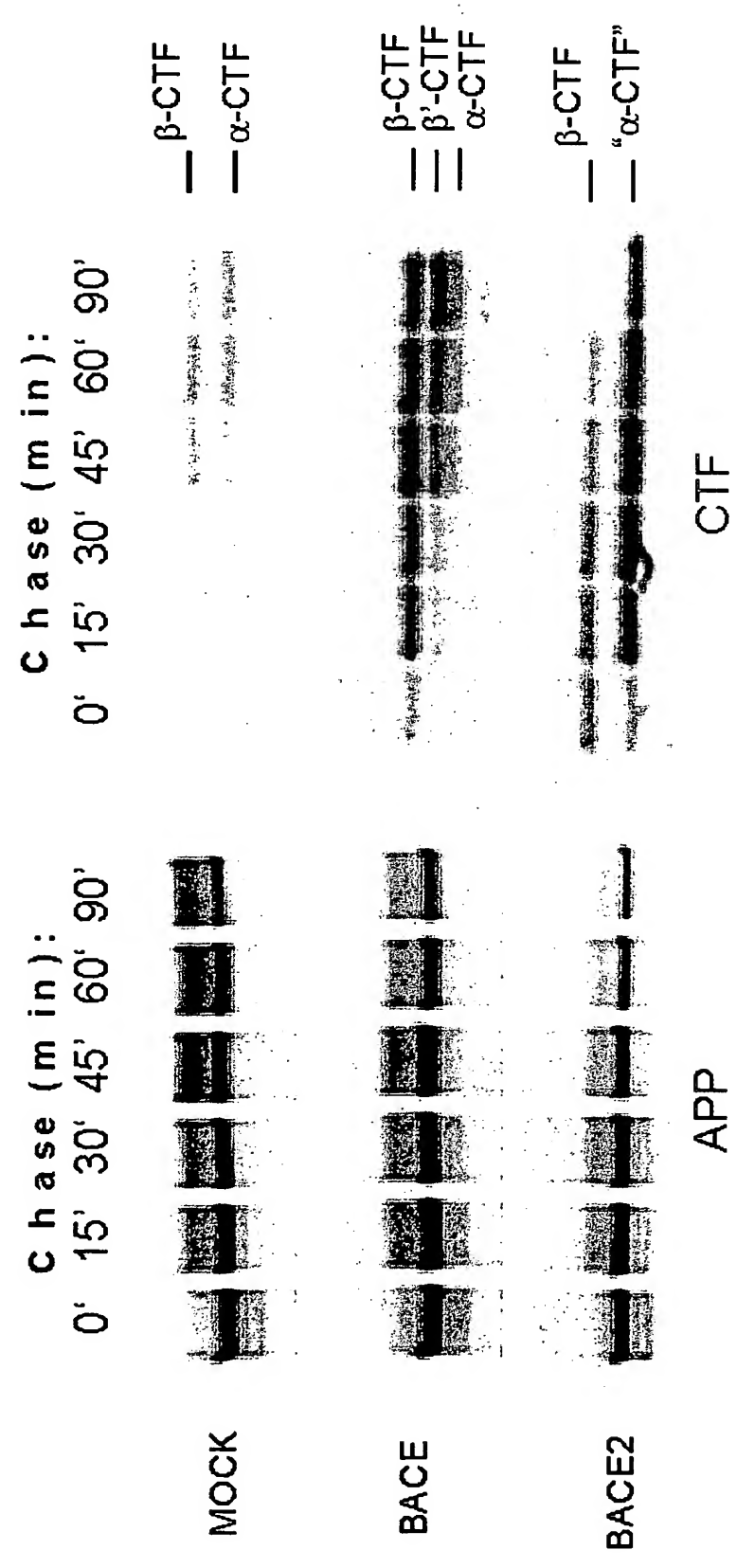
Chase (min):
0' 15' 30' 45' 60' 90'
MOCK
BACE
BACE2
APP
β-CTF
α-CTF
β-CTF
β'-CTF
α-CTF
β-CTF
"α-CTF"
CTF

FIG. 2E

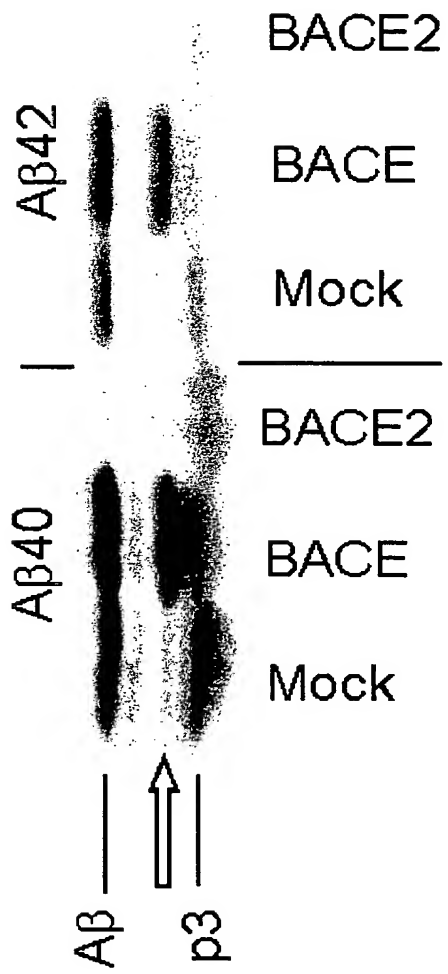

FIG. 2F

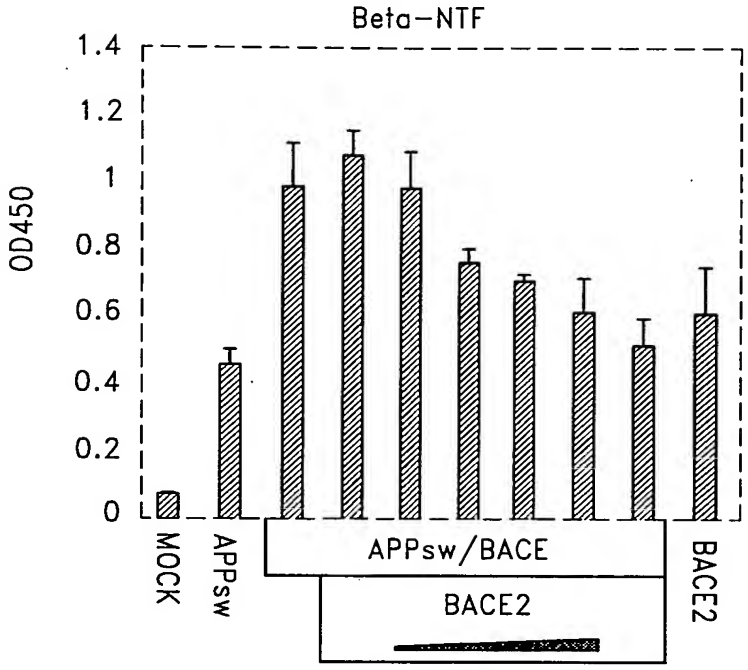
Beta-NTF
OD450
1.4
1.2
1
0.8
0.6
0.4
0.2
0
MOCK
APPsw
APPsw/BACE
BACE2
BACE2

FIG. 3A

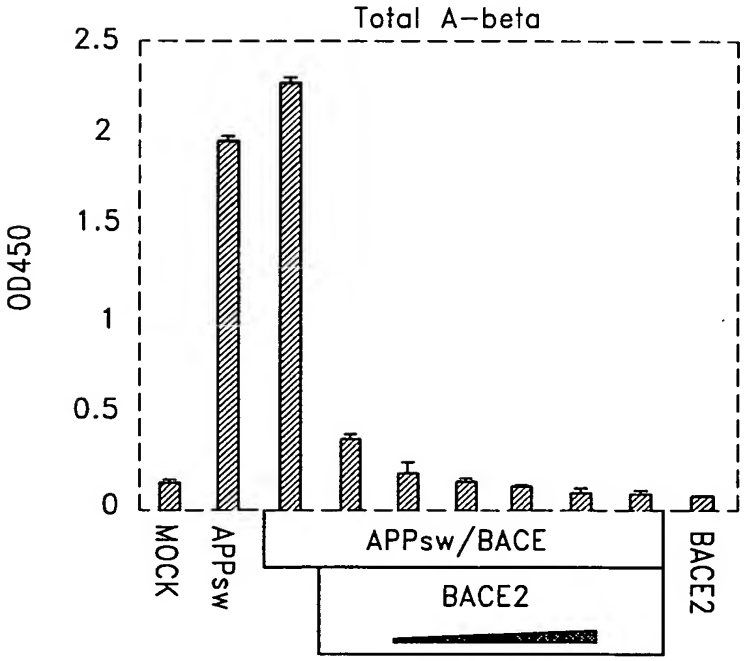
Total A-beta
OD450
2.5
2
1.5
1
0.5
0
MOCK
APPsw
APPsw/BACE
BACE2
BACE2

FIG. 3B

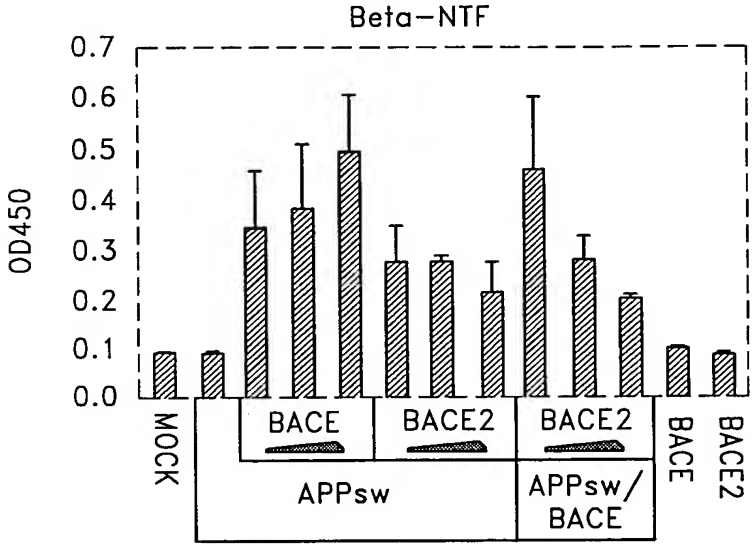

FIG. 4A

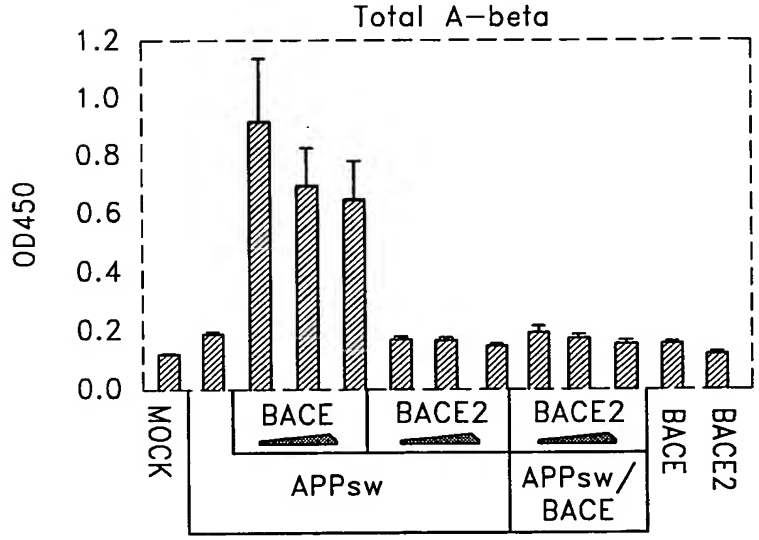

FIG. 4B

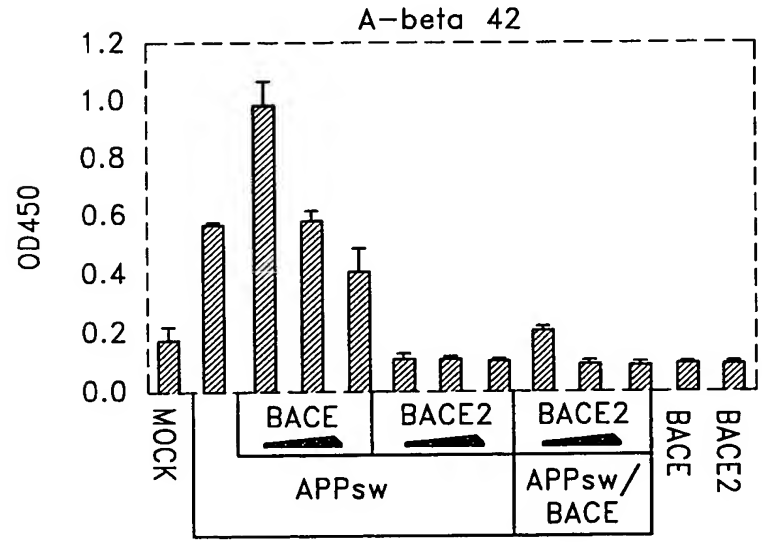

FIG. 4C

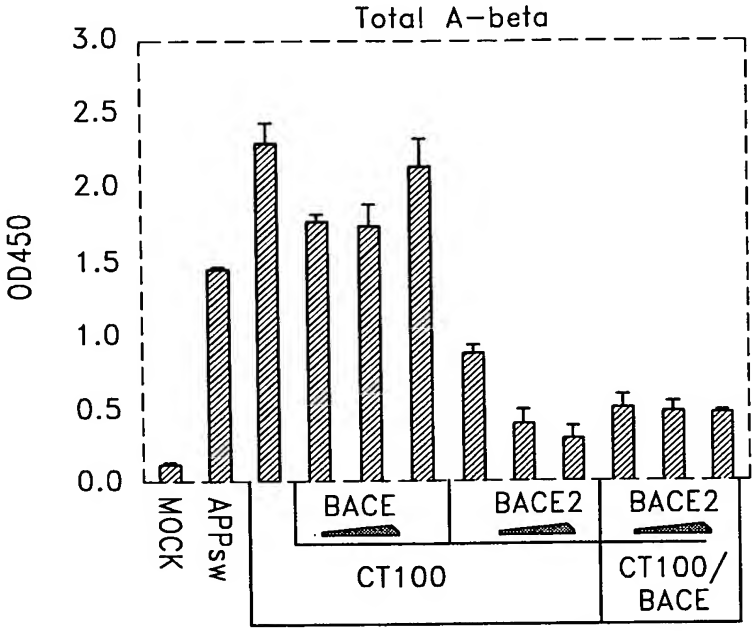
Total A-beta
OD450
3.0
2.5
2.0
1.5
1.0
0.5
0.0
MOCK
APPsw
BACE
BACE2
BACE2
CT100
CT100/
BACE

FIG. 5A

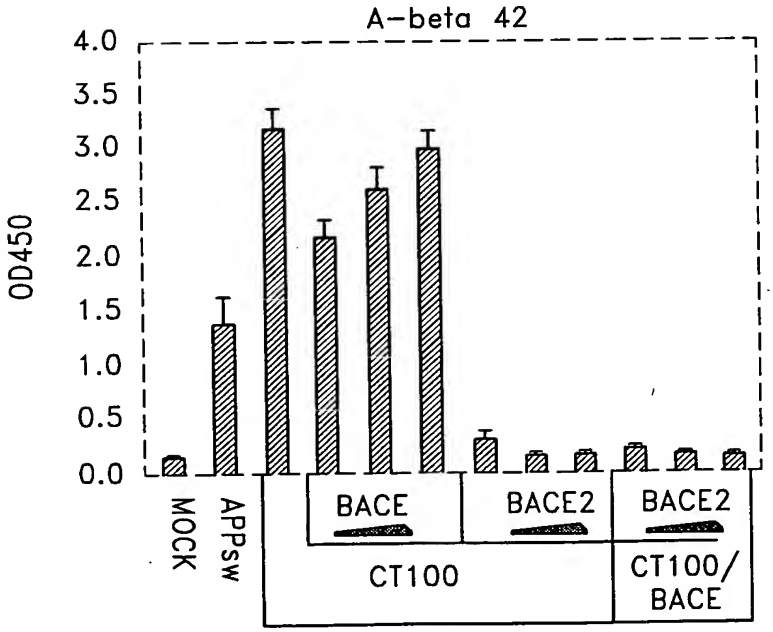
A-beta 42
OD450
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
MOCK
APPsw
BACE
BACE2
BACE2
CT100
CT100/
BACE

FIG. 5B

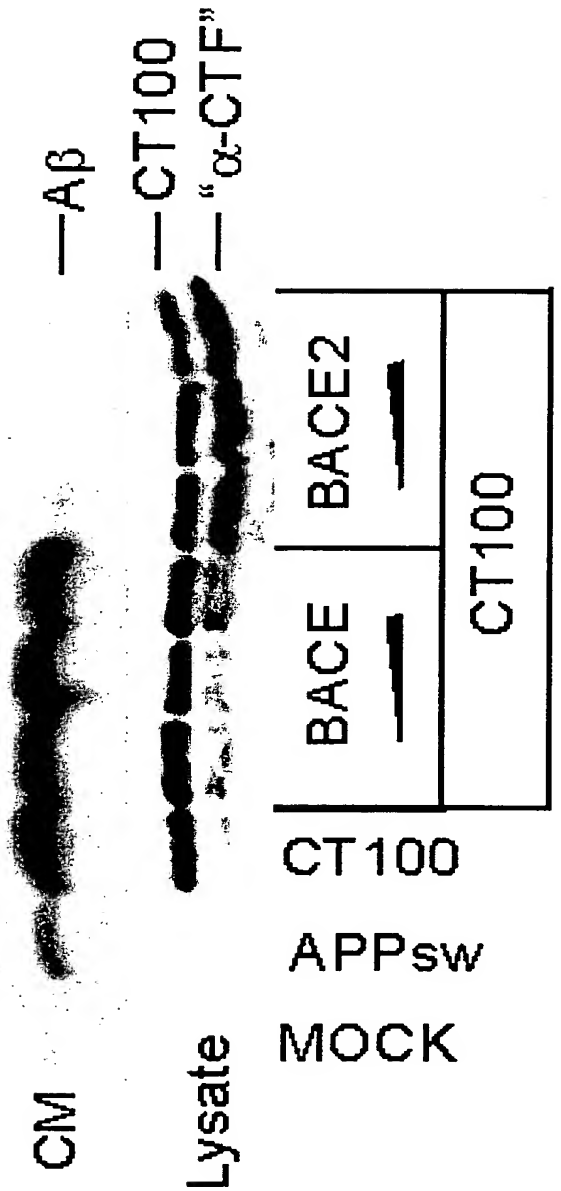
—Aβ
—CT100
—"α-CTF"
BACE2
CT100
BACE
CT100
CT100
APPsw
MOCK
CM
Lysate

FIG. 5C

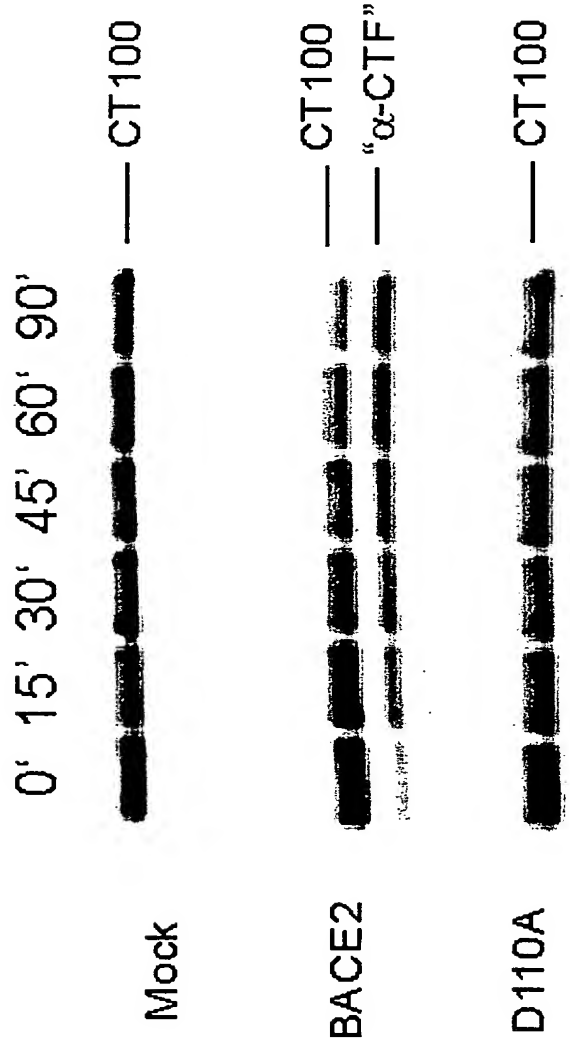

FIG. 5D

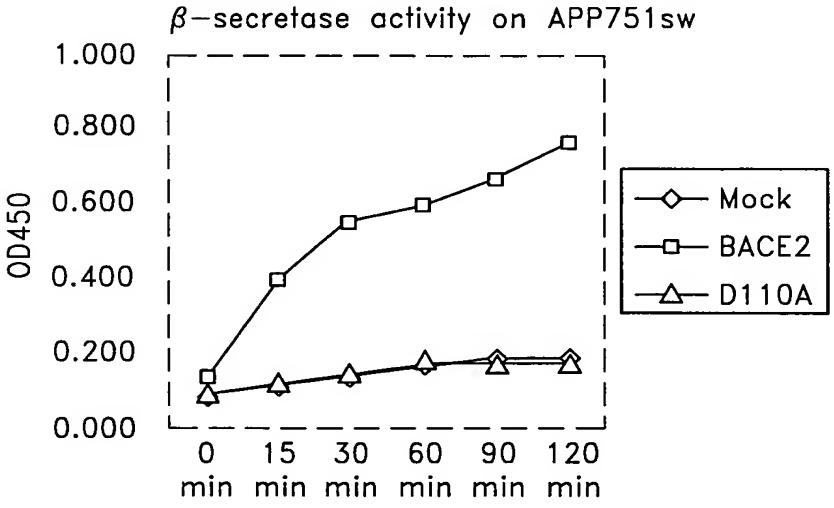
β−secretase activity on APP751sw
1.000
0.800
0.600
0.400
0.200
0.000
OD450
0 min
15 min
30 min
60 min
90 min
120 min
Mock
BACE2
D110A

FIG. 6A

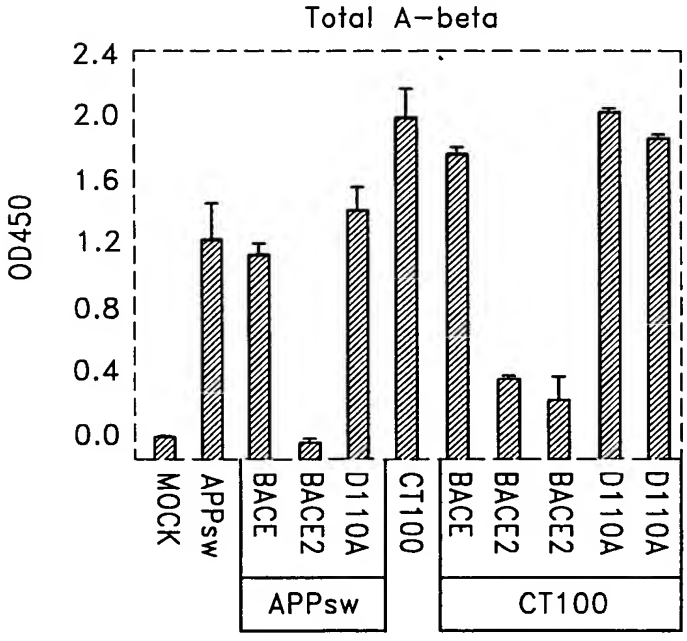
Total A−beta
2.4
2.0
1.6
1.2
0.8
0.4
0.0
OD450
MOCK
APPsw
BACE
BACE2
D110A
CT100
BACE
BACE2
BACE2
D110A
D110A
APPsw
CT100

FIG. 6B

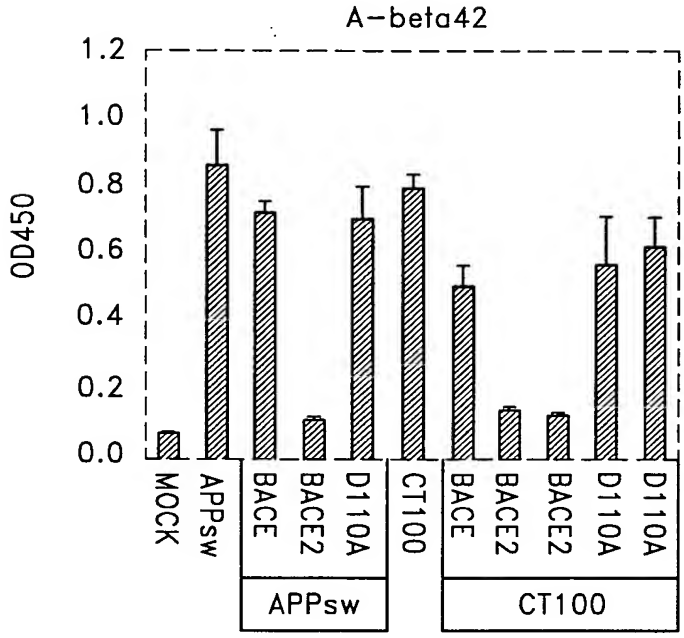
A-beta42
OD450
1.2
1.0
0.8
0.6
0.4
0.2
0.0
MOCK
APPsw
BACE
BACE2
D110A
CT100
BACE
BACE2
BACE2
D110A
D110A
APPsw
CT100

FIG. 6C

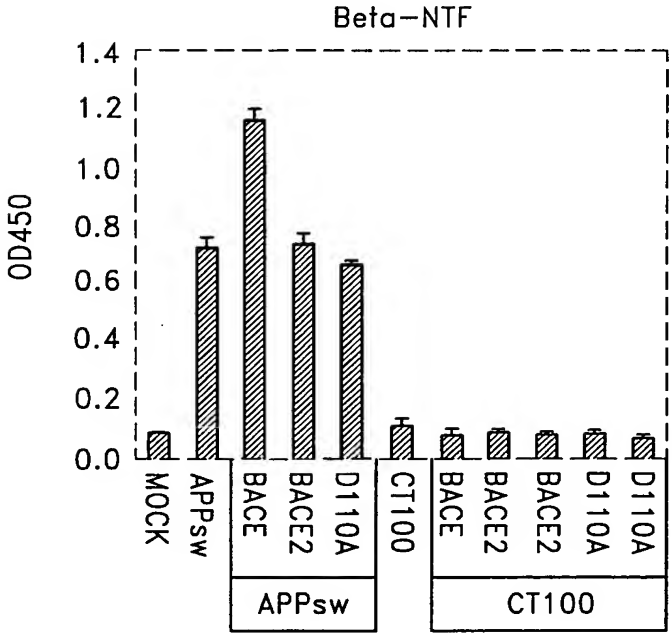
Beta-NTF
OD450
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
MOCK
APPsw
BACE
BACE2
D110A
CT100
BACE
BACE2
BACE2
D110A
D110A
APPsw
CT100

FIG. 6D

cccatccctg cccgcagccc cgcgcgccgg ccgagtcgct gagccgcggc
tgccggacgg gacgggaccg gctaggctgg gcgcgcgccc ccgggccccg
ccgtgggcat gggcgcactg gcccgggcgc tgctgctgcc tctgctggcc
cagtggctcc tgcgcgccgc cccggagctg gcccccgcgc ccttcacgct
gcccctccgg gtggccgcgg ccacgaaccg cgtagttgcg cccaccccgg
gacccgggac ccctgccgag cgccacgccg acggcttggc gctcgccctg
gagcctgccc tggcgtcccc cgcgggcgcc gccaacttct tggccatggt
agacaacctg caggggggact ctggccgcgg ctactacctg gagatgctga
tcgggacccc cccgcagaag ctacagattc tcgttgacac tggaagcagt
aactttgccg tggcaggaac cccgcactcc tacatagaca cgtactttga
cacagagagg tctagcacat accgctccaa gggctttgac gtcacagtga
agtacacaca aggaagctgg acgggcttcg ttggggaaga cctcgtcacc
atccccaaag gcttcaatac ttcttttctt gtcaacattg ccactatttt
tgaatcagag aatttctttt tgcctgggat taaatggaat ggaatacttg
gcctagctta tgccacactt gccaagccat caagttctct ggagaccttc
ttcgactccc tggtgacaca agcaaacatc cccaacgttt tctccatgca
gatgtgtgga gccggcttgc ccgttgctgg atctgggacc aacggaggta
gtcttgtctt gggtggaatt gaaccaagtt tgtataaagg agacatctgg
tataccccta ttaaggaaga gtggtactac cagatagaaa ttctgaaatt
ggaaattgga ggccaaagcc ttaatctgga ctgcagagag tataacgcag
acaaggccat cgtggacagt ggcaccacgc tgctgcgcct gccccagaag
gtgtttgatg cggtggtgga agctgtggcc cgcgcatctc tgattccaga
attctctgat ggtttctgga ctgggtccca gctggcgtgc tggacgaatt
cggaaacacc ttggtcttac ttccctaaaa tctccatcta cctgagagac
gagaactcca gcaggtcatt ccgtatcaca atcctgcctc agctttacat
tcagcccatg atgggggccg gcctgaatta tgaatgttac cgattcggca
tttccccatc cacaaatgcg ctggtgatcg gtgccacggt gatggagggc
ttctacgtca tcttcgacag agcccagaag agggtgggct tcgcagcgag
cccctgtgca gaaattgcag gtgctgcagt gtctgaaatt tccgggcctt
tctcaacaga ggatgtagcc agcaactgtg tccccgctca gtctttgagc
gagcccattt tgtggattgt gtcctatgcg ctcatgagcg tctgtggagc
catcctcctt gtcttaatcg tcctgctgct gctgccgttc cggtgtcagc
gtcgcccccg tgaccctgag gtcgtcaatg atgagtcctc tctggtcaga
catcgctgga aatgaatagc caggcctgac ctcaagcaac catgaactca
gctattaaga aaatcacatt tccagggcag cagccgggat cgatggtggc
gctttctcct gtgcccaccc gtcttcaatc tctgttctgc tcccagatgc
cttctagatt cactgtcttt tgattcttga ttttcaagct ttcaaatcct
ccctacttcc aag

FIG. 7

MGALARALLLPLLAQWLLRAAPELAPAPFTLPLRVAAATNRVVAPTPGPGTPAERHAD
GLALALEPALASPAGAANFLAMVDNLQGDSGRGYYLEMLIGTPPQKLQILVDTGSSNF
AVAGTPHSYIDTYFDTERSSTYRSKGFDVTVKYTQGSWTGFVGEDLVTIPKGFNTSFL
VNIATIFESENFFLPGIKWNGILGLAYATLAKPSSSLETFFDSLVTQANIPNVFSMQM
GAGLPVAGSGTNGGSLVLGGIEPSLYKGDIWYTPIKEEWYYQIEILKLEIGGQSLNL
DCREYNADKAIVDSGTTLLRLPQKVFDAVVEAVARASLIPEFSDGFWTGSQLACWTNS
ETPWSYFPKISIYLRDENSSRSFRITILPQLYIQPMMGAGLNYECYRFGISPSTNALV
IGATVMEGFYVIFDRAQKRVGFAASPCAEIAGAAVSEISGPFSTEDVASNCVPAQSLS
EPILWIVSYALMSVCGAILLVLIVLLLLPFRCQRRPRDPEVVNDESSLVRHRWK

FIG. 8